

Application No. 10/605,624
Amendment dated September 13, 2005
Reply to Office Action of June 15, 2005

Docket No.: 22137-00003-US1

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions and listings of claims in this application.

Claim Listing:

1. (Previously presented) A non-transverse propulsion drive arrangement for a vehicle, the non-transverse arrangement comprising:
an engine;
a transfer case having an input shaft coupled to an output shaft of the engine at one end of the engine, wherein the transfer case only has a single output shaft;
a transmission having an input shaft coupled to the single output shaft of the transfer case;
a drive shaft coupled to a single output shaft of the transmission; and
a differential coupled to the single output shaft of the transmission,
wherein the engine is located at a position which is laterally offset from and adjacent to a side of the transmission so as to be essentially parallel with the transmission along respective longitudinal axes thereof,
wherein the input shaft and output shaft of the transfer case are both located on a same side of the transfer case corresponding to the one end of the engine,
wherein each of the respective longitudinal axes of the engine and transmission are aligned with a longitudinal axis of the vehicle in a non-transverse manner, and
wherein both the engine and transmission are arranged behind the axle and differential in a rear-mounted engine configuration.

2. (Previously presented) The propulsion drive arrangement of claim 1, further comprising a set of wheels attached to an axle coupled to the single transmission drive shaft through the differential.

Claims 3 - 4: (Canceled).

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5. (Original) The propulsion drive arrangement of claim 2, wherein a moment arm of the engine and transmission arrangement is less than a distance between the differential and the transfer case.

6. (Currently amended) A non-transverse propulsion drive arrangement for a vehicle, the non-transverse arrangement comprising:

an engine;

a transfer case having an input shaft coupled to an output shaft of the engine at one end of the engine, wherein the transfer case only has a single output shaft;

a transmission having an input shaft coupled to the single output shaft of the transfer case;

a single drive shaft coupled to the single output shaft of the transmission; and

~~means for propelling the vehicle coupled to the single output shaft of the transmission;~~

a set of wheels attached to an axle coupled to the single drive shaft through a differential.

wherein the engine is located at a position which is laterally offset from and adjacent to a side of the transmission so as to be essentially parallel with the transmission along respective longitudinal axes thereof, and

wherein the input shaft and the single output shaft of the transfer case are both located on a same side of the transfer case corresponding to the one end of the engine,

~~wherein the means for propelling the vehicle comprises a set of wheels attached to an axle coupled to the single drive shaft through a differential;~~

wherein each of the respective longitudinal axes of the engine and transmission are aligned with a longitudinal axis of the vehicle in a non-transverse manner, and

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wherein both the engine and transmission are arranged in front of the axle and differential in a mid-mounted engine configuration.

7. (Previously presented) A method of providing propulsion for a vehicle, the method comprising:
arranging an engine and a transmission to be side-by-side in a non-transverse manner with respect to a longitudinal axis of the vehicle so that respective output shafts are essentially parallel and displaced from each other and aligned along the longitudinal axis of the vehicle;
providing a torque output on an engine output shaft;
reversing a direction of the torque output from the engine output shaft;
coupling the reversed torque output to a transmission input;
applying a single transmission output to a differential having a single input; and
applying two differential outputs to two associated drive elements,
wherein both the engine and transmission are arranged behind the one or more drive elements of the vehicle in a rear-mounted engine configuration.

8. (Previously presented) The method of claim 7, wherein the applying two differential outputs to two associated drive elements comprises applying the two differential outputs to a set of wheels.

9. (Canceled).

10. (Previously presented) The method of claim 7, further comprising ensuring that a moment arm of the engine and transmission arrangement is within a respective length of both the engine and the transmission.

11. (Previously presented) The propulsion drive arrangement of claim 1, wherein a front end of the engine is higher than a rear end of the engine so as to provide an angle between the engine output shaft and an input shaft of the transfer case.